

# A Plethora of Partnerships &

## Observational Examples

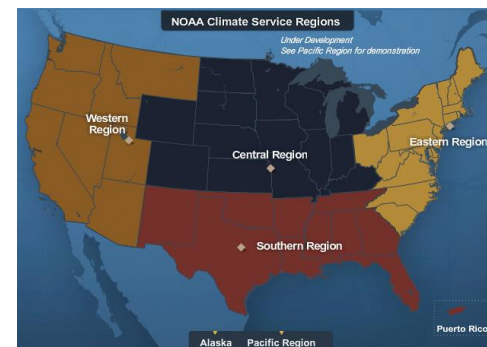
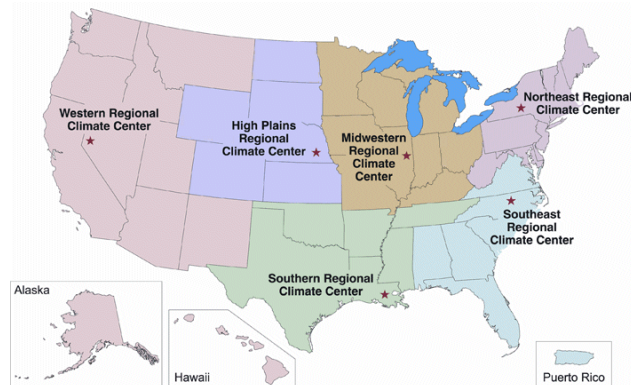
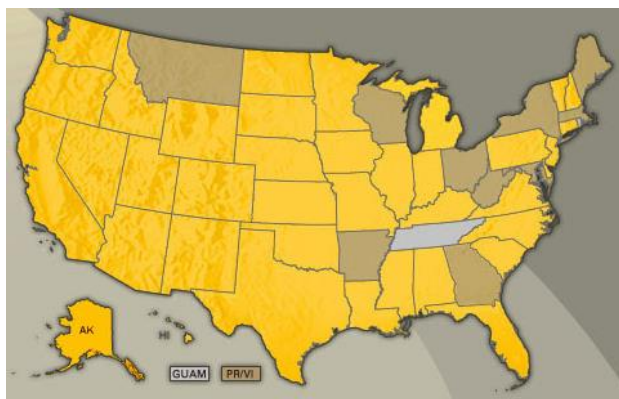
**Kelly T. Redmond**

**Western Regional Climate Center  
Desert Research Institute  
Reno Nevada**

**RISA Annual PI Meeting  
2015 Jan 13-15  
Charleston SC**



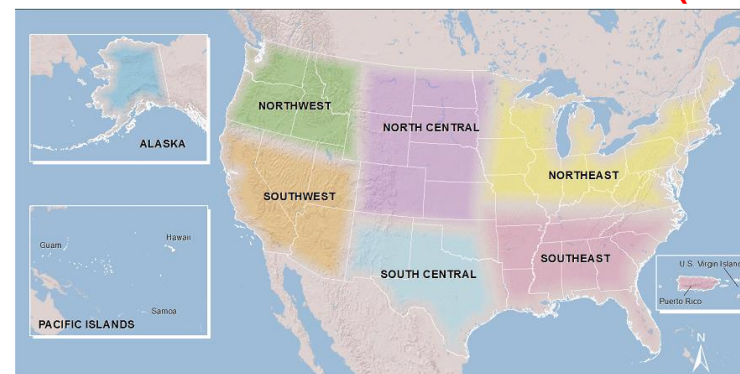
# State and regional climate services: A Complex Ecology



**State Climate Offices (states)**

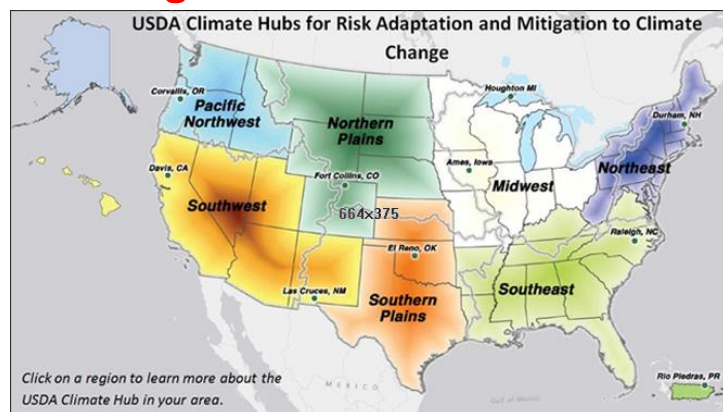
**Regional Climate Centers (NOAA)**

**Regional Climate Service Directors (NOAA)**



**Regional Integrated Sciences & Assessments (NOAA)**

**Climate Science Centers (USDI)**



**Regional Climate Hubs (USDA)**

**Landscape Conservation Cooperatives (USDI)**

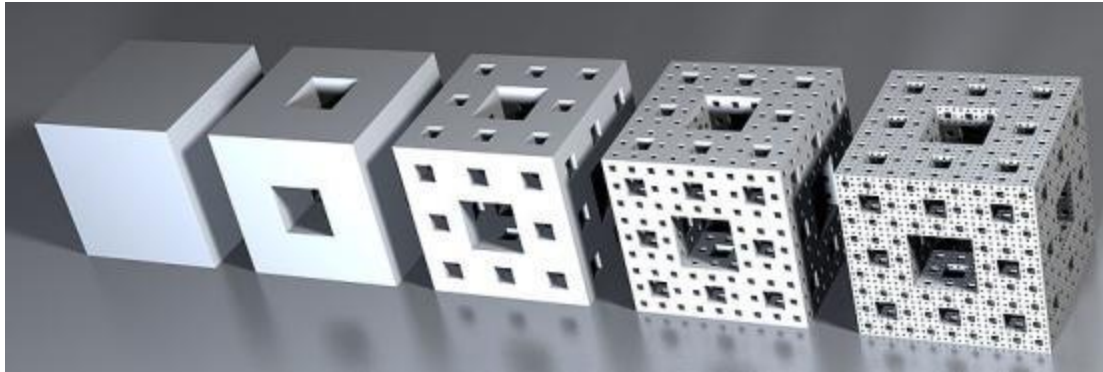


# How much do we or can we know?

## Sparse Knowledge Structures

### Constant Shifting of Players

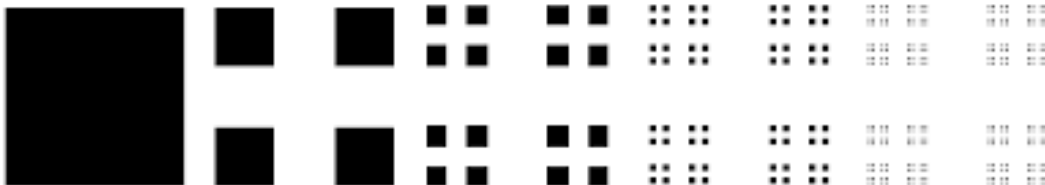
**Menger Sponge**



**Sierpinski Gasket**



**Cantor Dust**

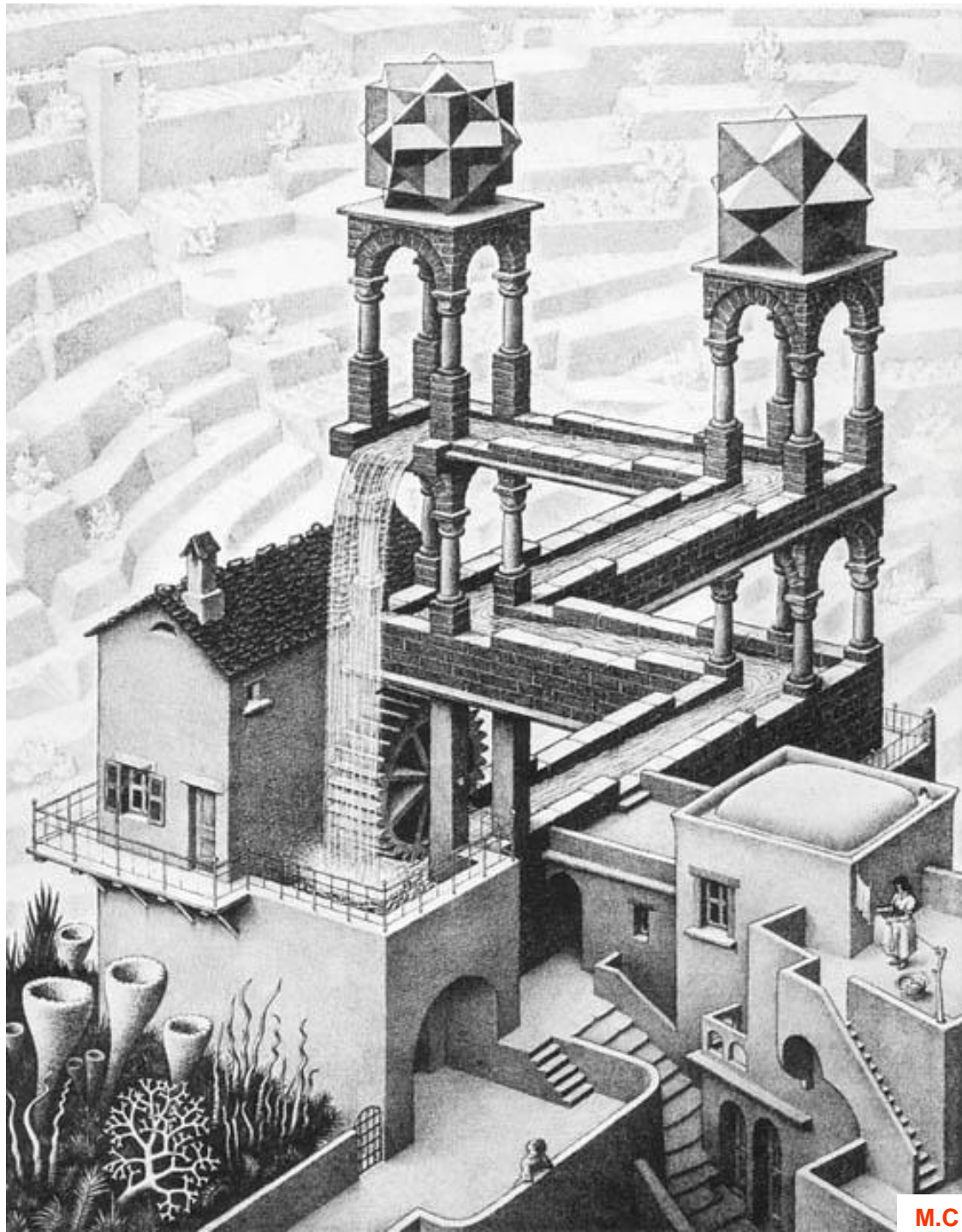


**Bar Code Verification #1**

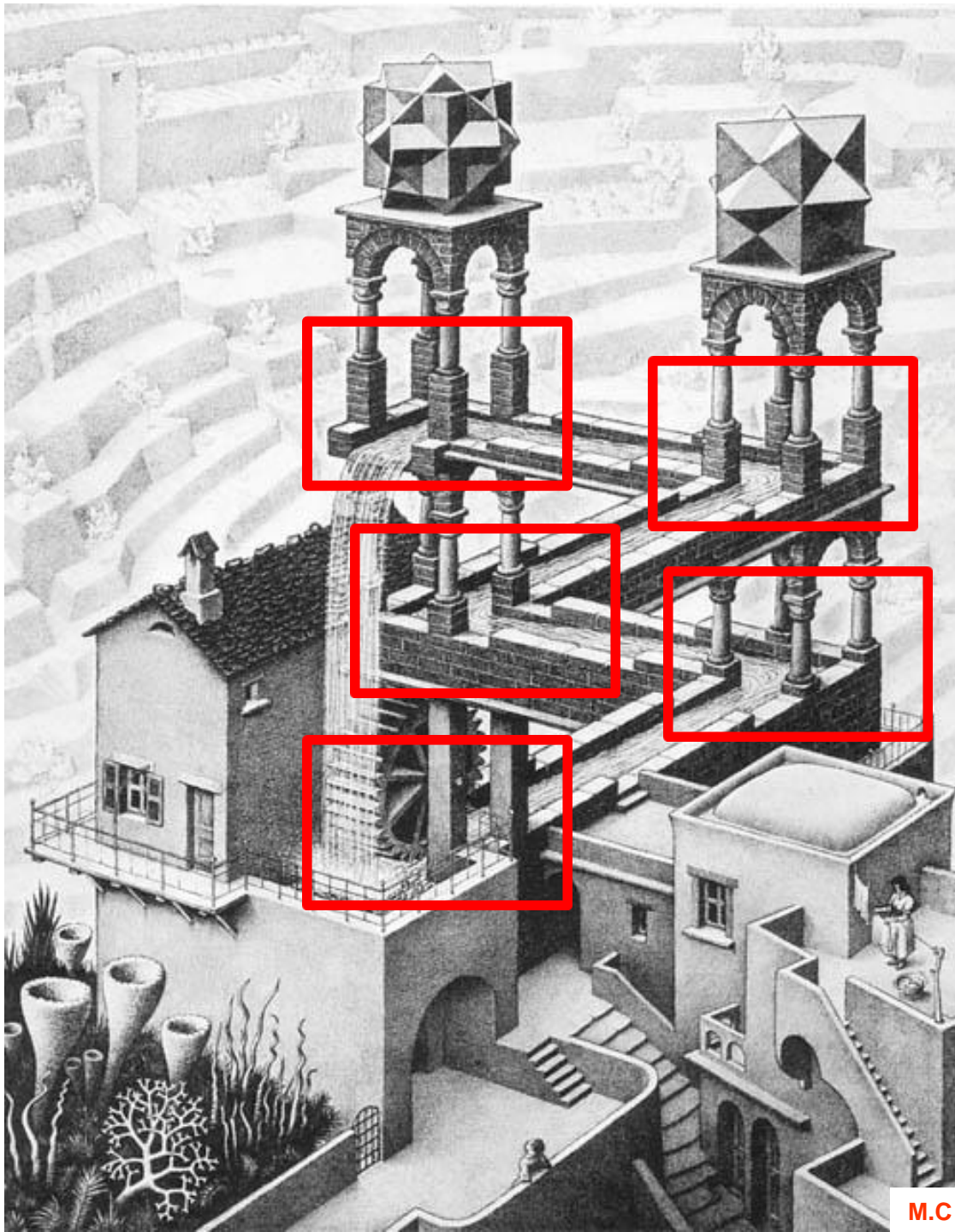


**Bar Code Verification #2**





M.C Escher, Waterfall, 1948



**A Pattern We  
Often Witness**

**Local Sense  
vs  
Global Nonsense**

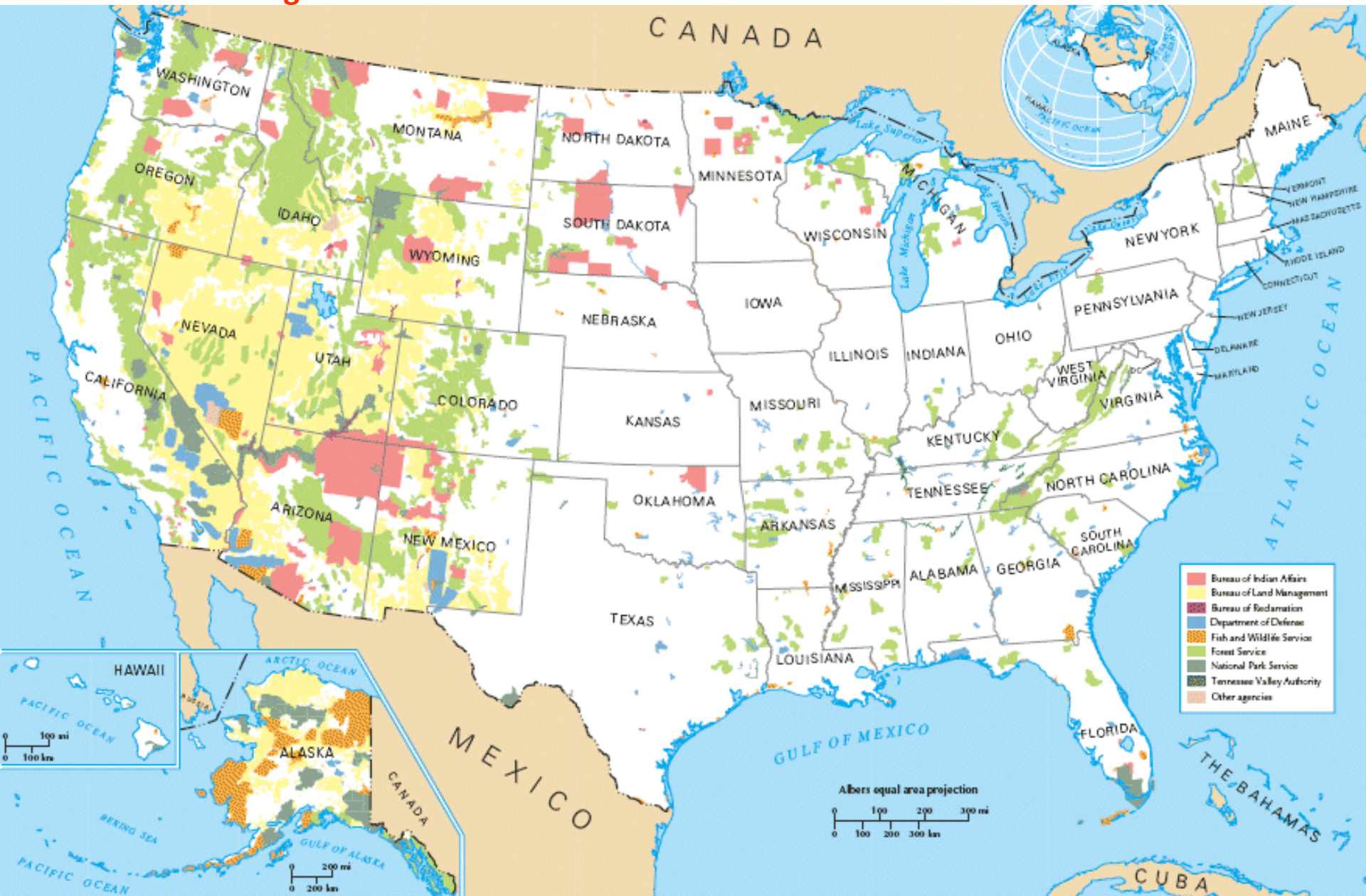
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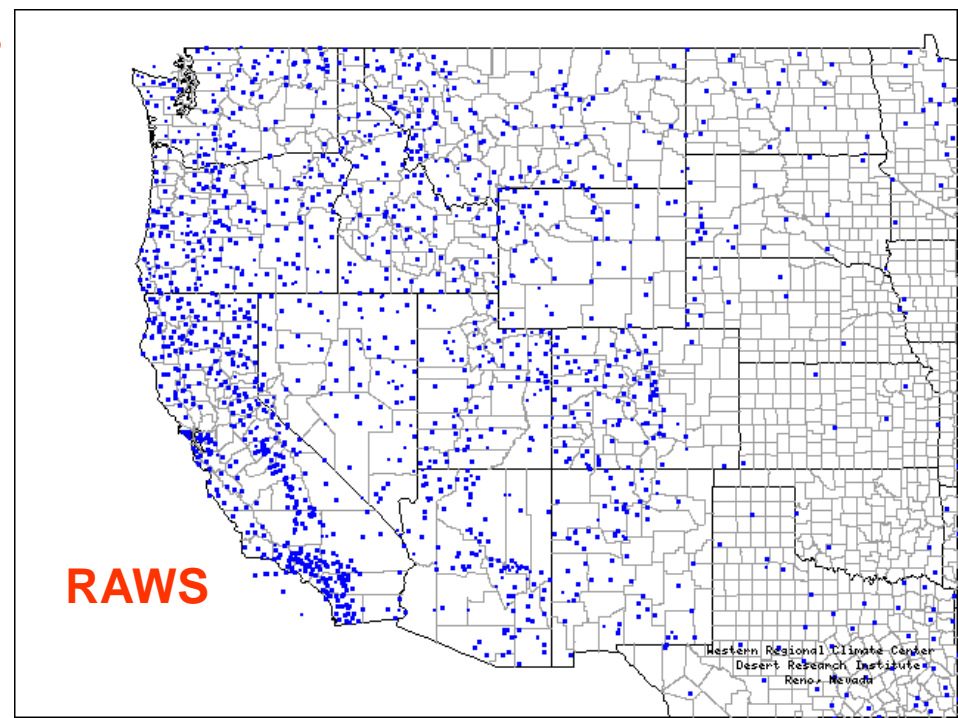
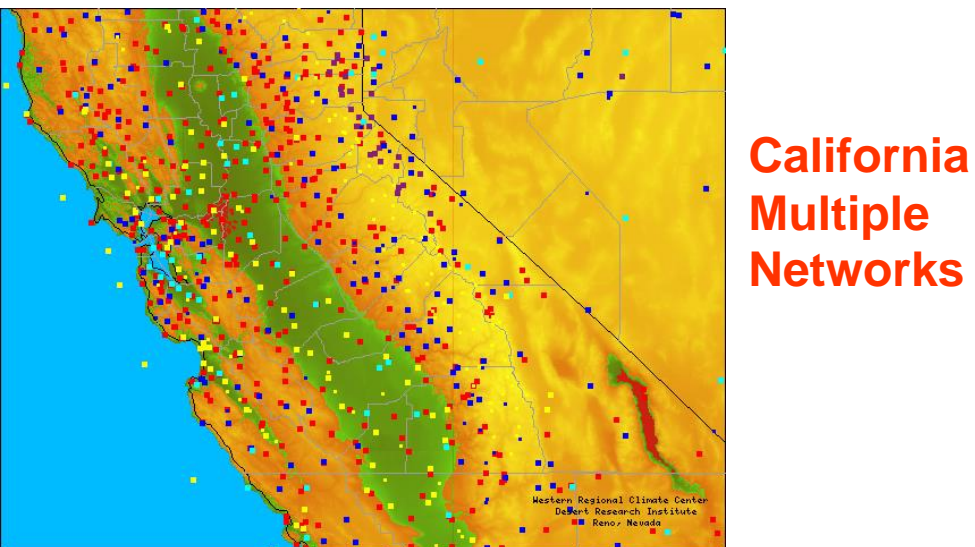
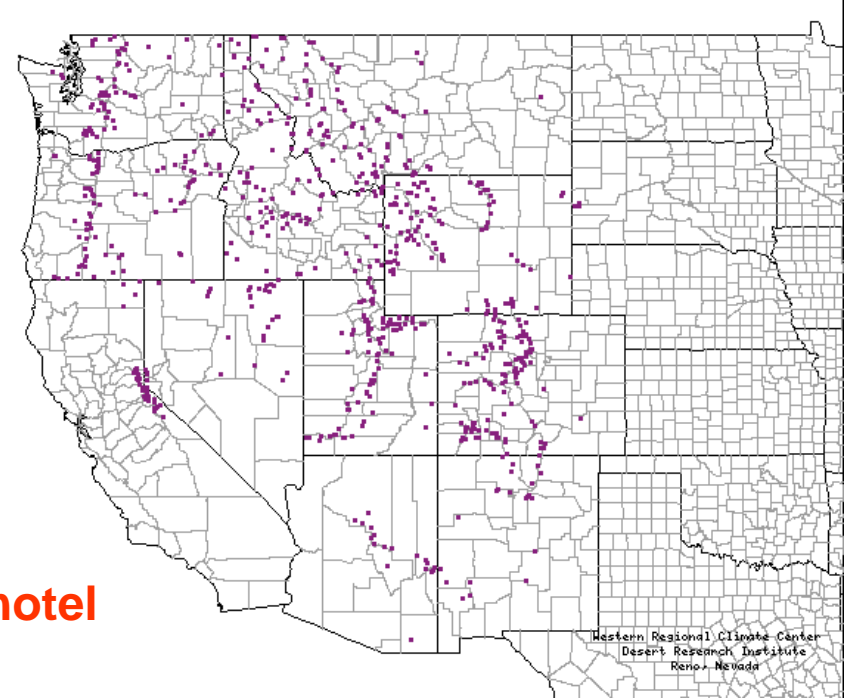
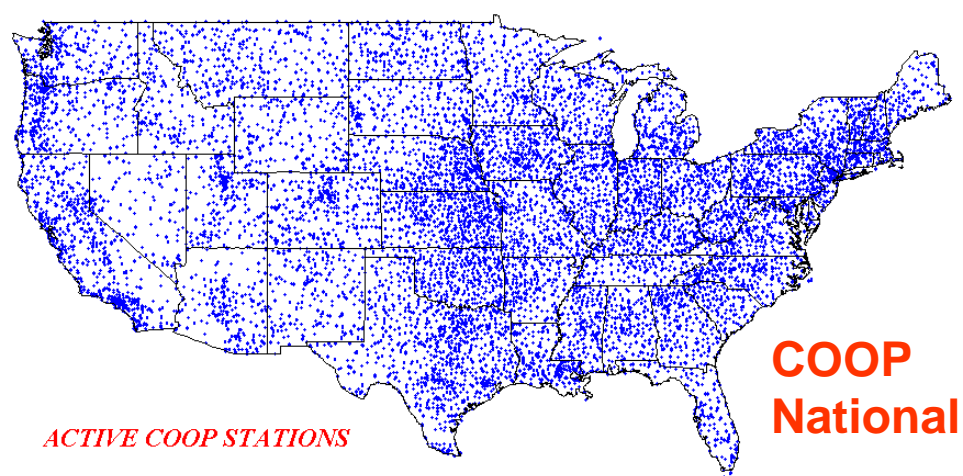
**“Natural” systems  
vs  
Human systems**



# Federal Lands of the United States.

West Contiguous 47 %. West with Alaska-Hawaii 54 %. 13 States: 93 % US Total







# The Role of Observations in Climate Services

## One. Philosophical and theoretical.

How, how much, do observations influence opinions/attitudes about climate ?

Do they?

Ratification of prior beliefs?

Verification of projected or expected outcomes.

How much does new information make a difference?

Observations perceived as “real,” forecasts perceived more as speculation

An ounce of observation is worth a pound of forecast.

(Mostly)



# The Role of Observations in Climate Services

## Two. Practical.

All climate service activities need access to data and observations.

A cross-cutting activity among all players.

Almost all climate service activities need observationally based products.

The world of observations requires significant specialized knowledge.

Structures for proc data have to be quasi-operational.

Significant infrastructure in place: utilize it or help make it function better.

Reduced wheel re-invention.

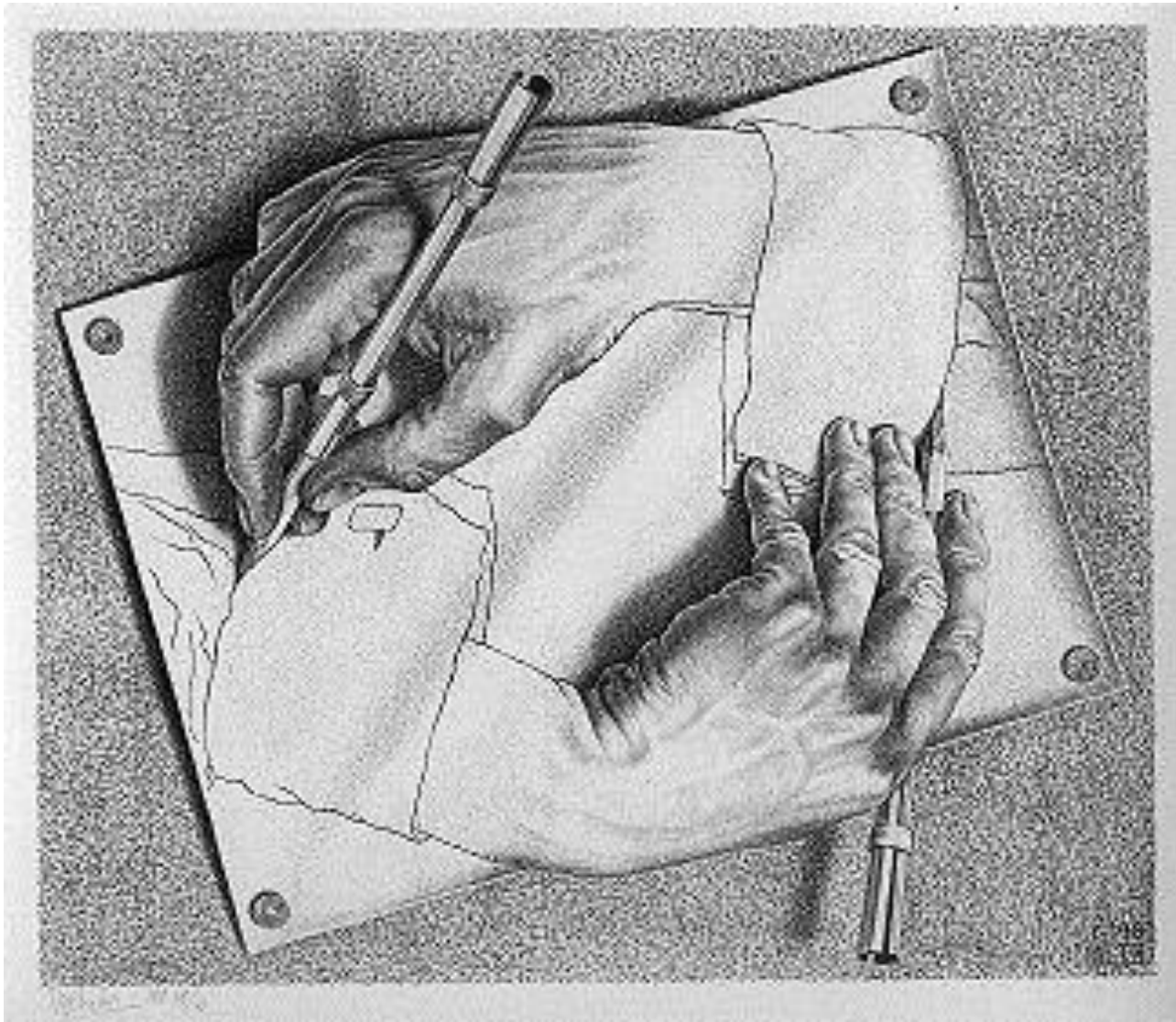
Common data sources “simple and straightforward,” but dozens that are not.

New ways and formats that people want data.

An integral part of a comprehensive climate services approach.

ACIS - Applied Climate Information System - A Service for the Community

## The Co-Production of Knowledge

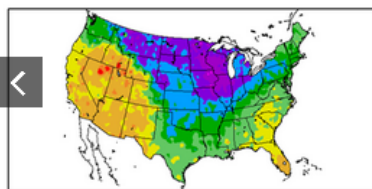


M.C Escher, Drawing Hands, 1948

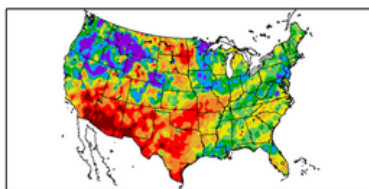


## ACIS Climate Summary Maps

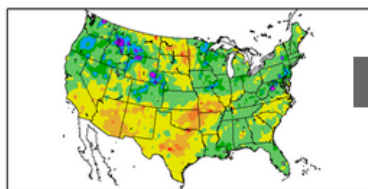
Departure from Normal Temperature (°F)  
2/1/2014 – 2/28/2014



Percent of Normal Precipitation (%)  
2/1/2014 – 2/28/2014



Monthly SPI  
2/1/2014 – 2/28/2014



ACIS Climate Maps provide precipitation and temperature maps at the national, regional, and state level.

## Announcements

- More web service examples with code have been added to the web service documentation (11/07/2014)
- Press release: **Online Atlas Analyzes Local Drought History** (04/07/2014)
- The latest Quarterly Climate Impacts and Outlook reports are now available! Access the reports **here**. (03/24/2014)
- The ACIS priority scheme was adjusted to give the CF6 a higher priority than GHCN-Daily for the most recent 90 days. (03/14/2014)
- Press release: **New Climate Tools Help Farmers and Advisors Make Informed Decisions** (02/24/2014)
- Removed olddata.rcc-acis.org from service. (02/27/2014)
- Removed testdata.rcc-acis.org. This hostname will only be used for occasional testing. (12/15/2013)

## Applied Climate Information System

The Applied Climate Information System (ACIS) was developed and is maintained by the NOAA Regional Climate Centers (RCCs). It was designed to manage the complex flow of information from climate data collectors to the end users of climate data information. The main purpose of ACIS is to alleviate the burden of climate information management for people who use climate information to make management decisions.

ACIS is a fully functional system with a flexible design and is constantly evolving to incorporate additional data sources, generate new and improved data products, take advantage of emerging technologies, and respond to the needs of its users.

### SC ACIS

🔍 ?

#### Welcome to SC ACIS Version 2

- November 14, 2014: A graph option has been added to the First/Last Dates product and trend/smoothing options are now available for this product and Seasonal Time Series.
- November 7, 2014: A [training video](#) is now available (best viewed full screen).
- October 31, 2014: An option to add a moving average to Seasonal Time Series graphs was added.

➔ Select a product from the choices to the left.

**scacis.rcc-acis.org**



**Thank  
You !**

**20101008**

